DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Arnold Schwarzenegger, Governor

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011461 Address: 333 Burma Road **Date Inspected:** 13-Jan-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang and Wu Zhi Cheng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG Trail Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 5AE (Cat Walk)

This Quality Assurance (QA) Inspector witnessed final tension verification for Catwalk at Bottom Panel from Panel Point (PP) 29, PP 30 and PP 31 for Segment 5AE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00233 Dated January 13, 2010.

Bolt sizes used were M16 x 40 RC Set# DHGM160019 and final torque required was 200 N-m.

Bolt sizes used were M16 x 45 RC Set# DHGM160010 and final torque required was 200 N-m and

Bolt sizes used were M16 x 50 RC Set# DHGM160011 and final torque required was 200 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-118.

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Segment 5BE (Cat Walk)

This Quality Assurance (QA) Inspector witnessed final tension verification for Catwalk at Bottom Panel from Panel Point (PP) 32, PP 33 and PP 34 for Segment 5BE and Side Panel between PP 32.5 and PP 33. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00233 Dated January 13, 2010.

Bolt sizes used were M16 x 40 RC Set# DHGM160019 and final torque required was 200 N-m.

Bolt sizes used were M16 x 45 RC Set# DHGM160010 and final torque required was 200 N-m and

Bolt sizes used were M16 x 50 RC Set# DHGM160011 and final torque required was 200 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-118.

Segment 5CE (Cat Walk)

This Quality Assurance (QA) Inspector witnessed final tension verification for Catwalk at Bottom Panel from Panel Point (PP) 35 and PP 36 for Segment 5CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00233 Dated January 13, 2010.

Bolt sizes used were M16 x 40 RC Set# DHGM160019 and final torque required was 200 N-m.

Bolt sizes used were M16 x 45 RC Set# DHGM160010 and final torque required was 200 N-m and

Bolt sizes used were M16 x 50 RC Set# DHGM160011 and final torque required was 200 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-118.

Segment 5CW to 6AW (Individual Survey by Caltrans)

This QA Inspector along with Caltrans QA Mr. Manikandan Murugan performed Joint Inspection for the T-Ribs to T-Ribs at Side Panel Cross Beam Side (Total 19 Nos.), Bottom Panel (Total 18 Nos.), Side Panel Counter Weight side (Total 19 Nos.) for Segment 5CW to 6AW (Field Segment Splice) between Panel Point (PP) 37 and PP 38. The measured readings were fed in spread sheet, generated the report and submitted to the Task Leader and Engineer for review.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Side Panel Counter Weight side for Segment 6BW to 6CW the welding has been completed form inside and carbon arc gouged form external due to lack of penetration. Weld identified as OBW6C-002. The welder was identified as 068764. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM-1. It was observed that the parameters noted down by ZPMC QC are in

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compliance with WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer